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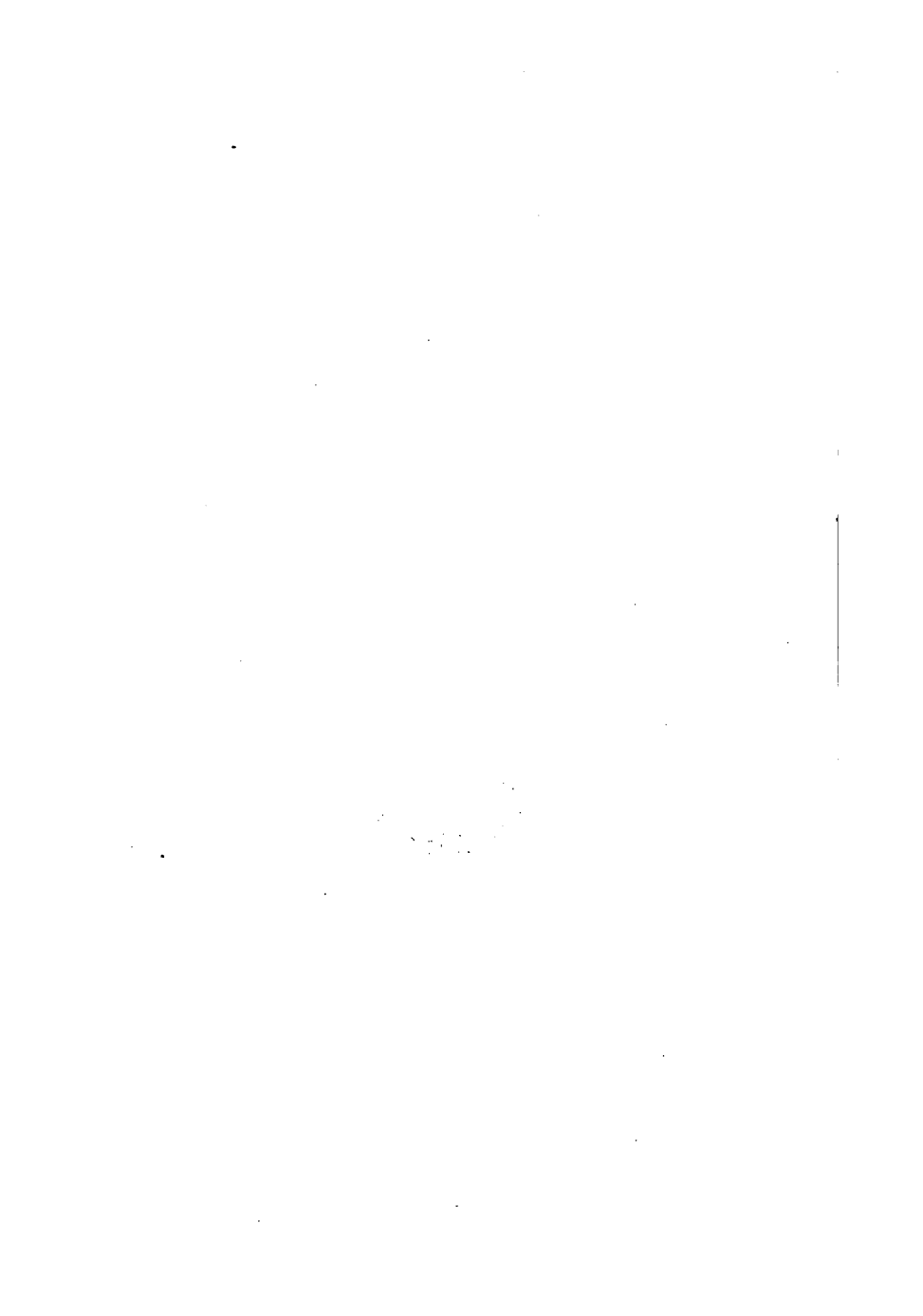
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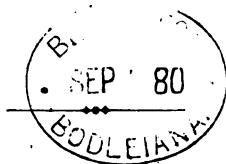






A SCHOOL GEOGRAPHY
OF
NEW ZEALAND.

BY
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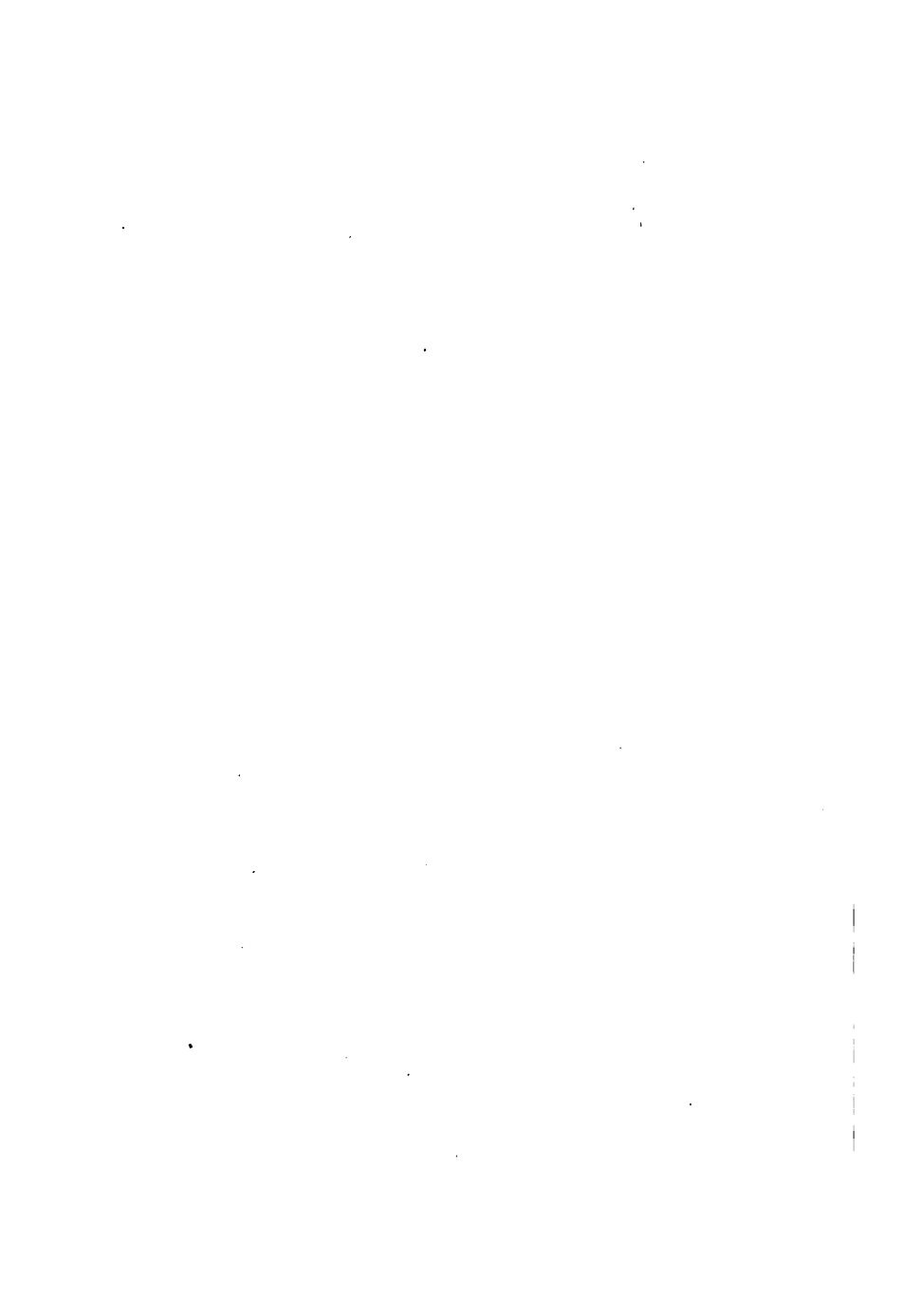
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PREFACE.

THE ready sale of the first edition of this little book has given the author the opportunity of placing before the public of New Zealand an improved issue, better adapted for use in Schools. The plan has not been modified, but the amount of matter included has been cut down by the omission of the account of the Australian Colonies. Great pains have been taken to secure accuracy of statement, and to present a full and faithful account of the present condition of the Colony. The author is greatly indebted to Mr. James M'Kerrow, Assistant Surveyor-General, for much valuable information most readily supplied; and also to Messrs. R. J. O'Sullivan, W. Colenso, and R. Lee, Inspectors of Schools in different parts of New Zealand, besides several other gentlemen interested in the subject.

DUNEDIN, 1880.



NEW ZEALAND.

POSITION OF NEW ZEALAND.

NEW ZEALAND is a **Colony** of the **British Empire**, and lies in the south-western region of the Pacific Ocean, about 1,200 miles south-east of Australia, and 12,000 from Great Britain. It comprises the **North Island**, the **South Island**, and **Stewart Island**, with the small islands near their coasts; also the Chatham Islands, the Auckland Islands, Campbell Island, and Bounty and Antipodes Islands—all lying a considerable distance off. The Antipodes group is so named from its being nearly opposite to Great Britain.

The three main islands lie between $34^{\circ} 22'$ and $47^{\circ} 18'$ south latitude, and $166^{\circ} 27'$ and $178^{\circ} 34'$ east longitude.

AREA AND DIMENSIONS.

The area of New Zealand is 106,260 square miles, or somewhat less than that of Great Britain and Ireland, which is 121,878 square miles. The distance between the north and south extremities is about 1,100 miles, and the average breadth about 120, while no part is more than 75 miles from the coast.

The **South Island** is about 550 miles long, with a breadth of from 140 to 180 miles, and an area of 55,244 square miles; being nearly the size of England and Wales.

The **North Island** is about 550 miles long, with a greatest breadth of 280 miles, and an area of 44,736 square miles; being rather less than the area of England, exclusive of Wales.

Stewart Island is 30 miles long by 25 broad, and has an area of 1,300 square miles.

The coast line is about 3,000 miles in length.

Cook Strait—13 miles across at the narrowest part—separates the North and South Islands.

Foveaux Strait—about 15 miles across—separates the South Island from Stewart Island.

THE POLITICAL DIVISIONS.

The **Main Islands** are divided into **Provincial Districts**, which represent the former Provinces, and are subdivided into Counties.

The **South Island** contains five **Provincial Districts**, namely:—

(1.) **Marlborough**, in the North-east, subdivided into three Counties. Its chief town is **Blenheim**.

(2.) **Nelson**, south-west of Marlborough, touching the East, North, and West Coasts, and subdivided into seven Counties. Its chief town is **Nelson**.

(3.) **Canterbury**, south of Nelson, on the East Coast, subdivided into six Counties. Its chief town is **Christchurch**.

(4.) **Otago**, south of Canterbury, and including Stewart Island, subdivided into fourteen Counties. Its chief town is **Dunedin**.

(5.) **Westland**, west of Canterbury, forming a single County. Its chief town is **Hokitika**.

The **North Island** contains four **Provincial Districts**, namely :—

(1.) **Auckland**, occupying the North, subdivided into twenty-one Counties. Its chief town is **Auckland**.

(2.) **Hawke's Bay**, on the East Coast, subdivided into three Counties. Its chief town is **Napier**.

(3.) **Wellington**, occupying the South, subdivided into six Counties. Its chief town is **Wellington**.

(4.) **Taranaki**, on the West Coast, subdivided into two Counties. Its chief town is **New Plymouth**.

New Zealand thus contains 63 Counties, 32 of which lie in the North Island, and 31 in the South Island.

COAST FEATURES.

SOUTH ISLAND.

North of **Nelson** and **Marlborough** :—

Cape Farewell, from which a sand - bank, called Farewell Spit, extends a long way to the east.

Golden or **Massacre Bay** (here some of Tasman's sailors were killed by Natives).

Tasman or **Blind Bay**.

The French Pass, a narrow channel, between **D'Urville Island** and

the mainland, through which steamers can just pass when tide and weather are favourable.

Admiralty Bay.

Pelorus Sound, a picturesque branching inlet.

Cape Jackson.

Queen Charlotte Sound, a picturesque branching inlet.

Tory Channel, the Eastern entrance to **Queen Charlotte Sound**.

East of **Marlborough**:—

Port Underwood.

Cloudy Bay.

Cape Campbell.

East of **Canterbury**:—

Pegasus Bay.

Port Cooper or Lyttelton.

Banks Peninsula.

Akaroa Harbour.

Canterbury Bight.

East of **Otago**:—

Moeraki Bay.

Otago Harbour.

Otago Peninsula.

Cape Saunders.

Molyneux Bay.

Nugget Point.

South of **Otago**:—

Toetoes Bay.

Foveaux Strait.

Bluff Harbour.

Bluff Head.

Tewaewae Bay.

West of **Otago**:—

Preservation Inlet.

Chalky Inlet.

West Cape.

Dusky Sound.

Doubtful Inlet.

Milford Sound.

Martin Bay. These Western inlets resemble the fiords of Norway, are very deep, and, winding in among high and precipitous mountains, present some of the grandest scenery in the world.

West of **Westland**:—

Cascade Point.

Jackson Bay.

West of **Nelson**:—

Cape Foulwind.

STEWART ISLAND.

Paterson Inlet, and Port Pegasus on the East.

NORTH ISLAND.

North and East of **Auckland**:—

Cape Reinga (the Natives believed this to be the road to the spirit world).

North Cape.

Cape Karakara.

Doubtless Bay.

Bay of Islands.

Cape Brett.

Bream Head.

Hauraki Gulf.

North and East of Auckland (*Continued*)—

Waitemata Harbour.

Tamaki Strait.

Firth of Thames.

Cape Colville.

Coromandel Channel.

Mercury Bay.

Tauranga Harbour.

Bay of Plenty.

Cape Runaway.

East Cape.

Poverty Bay.

East of **Hawke's Bay**:—

Mahia Peninsula.

Hawke Bay.

Cape Kidnappers.

Cape Turnagain.

South of **Wellington**:—

Cape Palliser.

Palliser Bay.

Port Nicholson.

West of **Wellington**:—

Cook Strait.

Cape Terawhiti.

South Taranaki Bight.

West of **Taranaki**:—

Cape Egmont.

North Taranaki Bight.

West of **Auckland**:—

Kawhia Harbour.

Whaingaroa or Raglan Harbour.

Manukau Harbour.

Kaipara Harbour.

Hokianga Harbour.

Reef Point.

Ahaipara Bay.

Cape Maria Van Diemen.

New Zealand possesses numerous magnificent harbours, but several of them are inconveniently situated for inland communication. Of those most frequented, Waitemata, Wellington, and Lyttelton Harbours are the most spacious, secure, and accessible. All the inlets on the west of Auckland have sand-bars, and are more or less difficult of entrance for large vessels. The east coast of the North Island, to the south of East Cape, is deficient in good natural harbours, as is also the west coast of the South Island, except in the west of Otago, where the deep tranquil sounds afford easy shelter in all weathers. As the east coast is less stormy and tempestuous than the west, the principal steamer routes lie along it.

SURFACE FEATURES.

MOUNTAINS OF THE SOUTH ISLAND.

THE surface of **New Zealand** as a whole is remarkably rugged and uneven; but the South Island is more mountainous than the North one. The lofty **Southern Alps**, running along the greater part of it, and keeping throughout towards the West Coast, form the axis or backbone of the South Island. At both ends the **Main Range** breaks up into several subordinate ones. The flat and low-lying parts are found mainly on the east and south sides.

MINOR RANGES IN THE NORTH.

The **Spenser** and **St. Arnaud** Mountains (a continuation of the Southern Alps) lie near the centre of Nelson. The highest peak—Mount **Franklin**—rises to the height of nearly 10,000 feet, and is capped with perpetual snow.

From the **St. Arnaud** Mountains two distinct ranges diverge. The **Western** Range, called the Tasman Mountains, and in part the Marino Range, runs in a north-westerly direction towards Cape Farewell. Its chief peaks are Mounts Owen, Arthur, and Peel (6,000 feet). The **Eastern branch** takes a north-easterly course towards Cape Jackson. Its chief peaks are Ben Nevis and Mounts Rintoul and Richmond.

In **Marlborough**, the **Kaikoura** Mountains and the **Looker-on** Mountains, or **Seaward Kaikouras**, form parallel ranges running in a north-easterly direction. Mount **Odin**, the chief peak, is 9,700 feet in height.

The detached **Paparoa Range** runs parallel with the west coast of **Nelson** to the south of Cape Foulwind.

THE MAIN RANGE.

From the **Spenser Mountains** the **Southern Alps** extend south in a continuous chain to Otago. The highest portions are clad in perpetual snow, the snow-line being about 7,500 feet above sea level. Glaciers, or rivers of ice moving forward slowly, creep down the higher valleys. In former ages, these were much more extensive than now. The water produced by the melting of the Alpine snow-fields and glaciers is a main source of the rivers that flow eastward. The chief peaks are **Mount Castor** (8,633 feet), **Mount Cook** (13,200 feet), the highest point in the islands, **Mount Stokes** (12,200 feet), and **Mount Aspiring** (9,940 feet).

Numerous subordinate ranges branch off on the east into **Canterbury**. The **Malvern Hills**, west from **Banks Peninsula**, contain valuable coal seams. The **Two-Thumb Range** lies east of Mount Cook, and is continued south into the **Hunter's Hills**.

There are several low saddles in the range. **Arthur's Pass** (3,038 feet) is crossed by the road from Christchurch to Hokitika. **Haast Pass** (1,716 feet), west of Lake Wanaka, is by far the lowest, and is likely to become the future railway route to the West Coast.

MINOR RANGES IN THE SOUTH.

The greater part of **Otago** is covered by an irregular network of mountains, forming in the West a broken continuation of the **Southern Alps**. The following are the chief ranges:—the **Dunstan Mountains**, the **Hawkdun Mountains**, the **Kakanui Mountains**, the **Lammermoor Ranges**, the **Umbrella Range**, the **Garvie** and **Hector**

Mountains, the **Eyre** Mountains, the Takitimo Mountains, and the Hokonui Hills.

The most prominent peaks are—Mount **Earnslaw** (9,165 feet) in the line of the **Southern Alps**, **Double Cone** (7,688 feet), Mount **Pisa**, Mount **St. Bathans** (6,600 feet), Mount **Ida**, and Mount **Kurow**.

Mount **Angle**m (3,200 feet) is the highest peak in Stewart Island.

Banks Peninsula is a detached mass of volcanic hills of moderate elevation. Mount **Herbert** (3,050 feet) is the highest point. Some of the harbours of this peninsula appear to be ancient crater basins.

MOUNTAINS OF THE NORTH ISLAND.

The northern part of this **Island**, including Auckland Peninsula, is for the most part hilly, but the hills seldom form distinct ranges, or reach a great height. The highest peak in the peninsula is **Tutamoe** (2,576 feet). To the south of this hilly and undulating area are Mounts **Karehoe** (2,370 feet) and **Pironghia** (2,800 feet), near the West Coast, and south of Whaingaroa Harbour; Mount **Edgumbe** (2,575 feet), south of the Bay of Plenty; and Mounts **Hardy** (3,700 feet) and **Ikaurangi** (5,535 feet), between that bay and the East Coast.

The **Colville Range** occupies the Coromandel Peninsula, and runs south from it. This range abounds in gold-bearing reefs, often of great richness, and includes the Thames and Coromandel gold-fields.

About half-way down the island are the lofty volcanic peaks of Mount **Egmont** (8,270 feet), in **Taranaki**; and Mounts **Tongariro** (6,500 feet), still occasionally active, and **Ruapehu** (9,195 feet), in the north of **Wellington** and towards the centre of the island.

The **Main Range** of the North Island takes a southerly course, from near the Bay of Plenty to the south of Wellington. Its northern portion, one branch of which keeps towards East Cape, is irregular and comparatively low, but its southern portion forms several distinct parallel ranges, and reaches a high elevation, keeping throughout well towards the middle of the island.

Its principal divisions are the Te Whaiti and Kai Manawha Ranges, running south from Mount **Edgecumbe**; the **Kaweka**, and **Ruahine** Mountains, on the west border of **Hawke's Bay**; the **Tararua** Mountains, a continuation of the Ruahine Range, and cut off from it by the **Manawatu Gorge**, in the west of Wellington; the Rimutaka, a continuation of the **Tararua** Range; and the Puketoi and Maungaraki Mountains, east of the Tararua Range, and parallel to it.

RIVERS OF THE SOUTH ISLAND.

A.—RIVERS REACHING THE EAST COAST.

The **Wairau**, from the St. Arnaud Mountains, flows north-east through Nelson and Marlborough into Cloudy Bay.

The Awatere flows north-east through Marlborough into the Pacific.

The Clarence rises in Nelson, and flows north-east and south-east through Marlborough into the Pacific.

Waiau-ua or **Dillon**, from the Spenser Mountains, follows an irregular south-east course, through the richest district in Nelson, into the Pacific.

The Hurunui flows east between Nelson and Canterbury into the Pacific.

The Ashley flows east through North Canterbury into Pegasus Bay.

The **Waimakariri**, from the Southern Alps, flows east through North Canterbury Plain into Pegasus Bay. During seasons of flood it inundates large tracts of the plain.

The **Selwyn**, from the Malvern Hills, flows east through the Canterbury Plain into Lake Ellesmere.

The **Rakaia**, the **Ashburton**, and the **Rangitata**, fed by the snows of the central range, flow south-east through the Canterbury Plain into Canterbury Bight. All these rivers partake of the nature of mountain torrents, traverse the plains in shallow branching shingly channels, often a mile wide, and are liable to sudden floods.

The **Orari** and **Opihi** drain the hills south-east of the Two-Thumb Range, and flow south-east into Canterbury Bight.

The **Waitaki** drains a very large area of the South Alpine region, including Mount Cook, and flows in a south and south-east direction into the Pacific. Its chief feeders are the **Tekapo**, the **Pukaki**, the **Ohau**, the **Ahuriri**, and the **Hakateramea**. Near its mouth it is crossed by a substantial railway bridge three-quarters of a mile in length. A small portion of its basin is auriferous.

The **Kakanui** and **Shag** are small rivers flowing south-east through Otago into the Pacific.

The **Taieri** drains the eastern highlands and plains of Otago. It flows north, then bends into a southerly course, and reaches the Pacific after traversing the fertile Taieri Plain. Large areas in its basin are auriferous.

The **Clutha** drains an immense area in the north and centre of Otago, and flows along a channel mainly narrow and rock-bound, in a south-east direction, into Molyneux Bay. It is principally fed by the melting snows on the extensions of the Southern Alps, and, like all snow-fed

rivers, contains a larger volume of water in summer than in winter. The rise of this great river during the melting of the snows is happily kept within moderate bounds by the great natural reservoirs, Lakes Wakatipu, Wanaka, and Hawea, over whose broad expanse of 237 square miles the flood waters have to spread before pouring themselves into the main channel. Its chief tributaries are the **Kawarau**, swollen by its large affluent the **Shotover**, the **Manuherikia**, and the **Pomahaka**. The Clutha is the largest river in New Zealand, and discharges as much water daily as the Nile. It is navigable for 40 miles from its mouth, but the rapidity of its current is a great obstacle to its becoming a highway of traffic. Its basin is highly auriferous.

B.—RIVERS REACHING THE SOUTH COAST.

The **Mataura** drains a considerable mountainous area in the centre of Otago, and flows south into Toetoes Bay. The Nokomai and Wakaia are its chief tributaries; both are auriferous.

The Oreti, from the Eyre Mountains, flows south through the Southland Plain into New River Estuary.

The Aparima, from the Takitimo Mountains, flows south through a fertile district into Howell Roads.

The **Waiau** drains the Western Mountain region of Otago, and flows south into Tewaewae Bay. This river is the offspring of a grand lake-system, of which Te Anau and the beautiful Manipori are the principal.

C.—RIVERS REACHING THE WEST COAST.

Throughout three-quarters of the length of the South Island lofty mountains fringe the West Coast, so that the rivers have all short courses, though many of them have

great volume. The chief streams are the Hollyford in Otago; and Jackson River, Haast River, and the Hokitika River in Westland. The last traverses a highly auriferous country.

Towards the North the mountains occupy a more central position, and several rivers here make their way to the West Coast. The chief are as follows:—

The Teremakau flows west through an auriferous district into the Pacific.

The **Grey** drains a large area between the Central and the Paparoa Ranges, and flows south-west into the Pacific. Its basin is auriferous.

The **Buller** drains a large basin south of the Marino Range, and flows west into the Pacific, through a richly auriferous tract of country.

D.—RIVERS REACHING THE NORTH COAST.

The Motueka and Waimea flow north through Nelson into Tasman Bay.

RIVERS OF THE NORTH ISLAND.

A.—RIVERS REACHING THE NORTH AND EAST COASTS.

The Piako and the **Thames** flow north through Auckland into the Firth of Thames.

The Rangitaika and the Whakatane drain an extensive region south of the Bay of Plenty, and flow north into it.

The Wairoa South flows south through Auckland and Hawke's Bay, into Hawke Bay.

The Mohaka, Tutaekuri, Ngaruroro, and Tukituki, drain the slope east of the Kaweka and Ruahine Ranges, and flow into Hawke Bay

B.—RIVERS REACHING THE SOUTH COAST.

The **Ruamahanga** drains the central basin of Wellington, and flows south through the Wairarapa Valley into Palliser Bay.

The Hutt flows south into Port Nicholson.

C.—RIVERS REACHING THE WEST COAST.

The **Manawatu** drains a large mountain area, west of the Puketoi Range, and flows in a general south-west direction into South Taranaki Bight. It passes through the **Manawatu Gorge**, a low gap between the Ruahine and Tararua Mountains. The Teraumea and Oroua are its chief tributaries.

The **Rangitikei**, Turakina, and Whangaeahu flow south-west into South Taranaki Bight.

The **Whanganui** drains an extensive basin east of Mount Egmont, and flows south into South Taranaki Bight. At the town of Whanganui it is crossed by a fine iron bridge, with a swing span of 160 feet. Its lower part is navigable for vessels of considerable size.

The Patea flows south from Mount Egmont, through a most beautiful fertile district, into South Taranaki Bight.

The Mokau flows south-west, between Auckland and Taranaki, into North Taranaki Bight.

The **Waikato**, the largest river in the North Island, drains a large but shallow basin in the centre, passes through Lake Taupo, then flows in a north-westerly direction through a fertile valley, till near its mouth it bends west, and falls into North Taranaki Bight. The **Waipa** is its chief tributary. The Waikato is a great water highway, small steamers going as far as Cambridge, while

vessels of moderate size reach Mercer. There are extensive deposits of coal in its basin.

The **Wairoa North** flows south through Auckland Peninsula into Kaipara Harbour. Next to the Waikato, it is the largest river in Auckland Provincial District. It traverses magnificent kauri forests, and is navigable for large vessels 60 miles from Kaipara Estuary, and for smaller vessels 40 miles further.

PLAINS, DOWNS, AND LAKES OF THE SOUTH ISLAND.

The **Waimea** Plain, at the head of Tasman Bay, and the **Wairau** Plain, in the Lower Wairau Basin, were the scene of the earliest colonization of the South Island. Both contain rich loamy soil, well occupied by numerous settlers.

The **Amuri** District, in the Middle Dillon Basin, embraces a considerable extent of rolling downs, and includes the Hanmer Plain, famous for its hot springs.

The **Canterbury Plains** extend from near the Hurunui to the Waitaki, and constitute the largest level tract in New Zealand. They have a width of 30 miles north of the Rangitata, but become narrower towards the south. They are alluvial, and in many parts shingly, with the most fertile tracts at the north and south ends, and skirting the mountains and the coast. These plains are intersected by numerous railways, and support a large and rapidly increasing population.

Lake **Ellesmere**, at the outfall of the Selwyn, is tidal and very shallow, covering about 100 square miles, part of which it is proposed to reclaim.

Lakes **Coleridge** and **Heron**, in the Upper Rakaia Basin.

Lakes **Tekapo**, **Pukaki**, and **Ohau**, and the Mackenzie

and Upper Waitaki Plains, in the Upper Waitaki Basin. The Waitaki Lakes receive their waters from the glaciers and snow-fields of Mount Cook. They are evidently the remains of a great ancient lake that covered the Upper Waitaki Plains and much of the Mackenzie country. The Papakaio Plain occupies the Lower Waitaki Basin on the Otago side.

The **Oamaru Downs** stretch from the Papakaio Plain to the Kakanui Mountains, and along the coast to Moeraki. These downs consist for the most part of rich arable land having a limestone bottom, and are probably as fertile as any part of the colony.

The **Maniototo** Plain (dry and often shingly) in the Upper Taieri Basin; and the fertile **Taieri** Plain (largely arable, but partly swampy) in the Lower Basin.

Lakes Waipori and Waihola in the Taieri Plain.

The **Tokomairiro** Plain (wholly arable) south of the Taieri Plain.

Lakes **Hawea**, **Wanaka**, and **Wakatipu**, in the Upper Clutha Basin. These lakes are of great depth, and like most in the South Island appear to have been hollowed out by gigantic glaciers. At the foot of these lakes there are considerable tracts of flat land, formed of moraine material, with patches of glacier loess. Lake Wakatipu is 50 miles long, and 1 to 3½ wide. It covers 112 square miles, is 1,069 feet above sea level, and has a greatest depth of 1,350 feet, so that its bottom is about 300 feet below the level of the sea. A railway connects it with the South Coast, and several steamers ply on its waters, affording tourists great facilities for exploring its grand mountain scenery. Wanaka is 30 miles long, covers 75 square miles, and is 974 feet above sea level. Its diversified outline, and the high mountains that lie all around it, make it one of the

most beautiful lakes in the world. Hawea covers 50 square miles, and is similar in features to its sisters. The climate of the lake region is delightful, and the singularly clear and bracing air imparts a feeling of lightness and elasticity.

The Manuherikia Plain (arid and often shingly) in the middle, and the Clutha Plain (including the island Inch Clutha) in the Lower Clutha Basin.

The **Waiwera**, **Waipahi**, and **Tapanui Downs** stretch from the Clutha to the Mataura, lying chiefly in the Pomahaka Basin. These contain large tracts of good arable land.

The **SOUTHLAND** Plains stretch from the Mataura to the Waiau, being 40 miles long and 26 broad. Large tracts are fertile and dry, but many parts are sour and badly drained. The Hokonui Hills are entirely surrounded by this magnificent tract of level country.

Five-Rivers Plain in the Upper Oreti Basin.

Lakes **Te Anau** and **Manipori** in the Upper Waiau Basin. Te Anau is the largest lake in the South Island, having an area of 132 square miles, and a length of 40. On its west side three arms or fiords penetrate the mountains to within 10 miles of the west-coast sounds. The scenery up these arms is most grand and impressive. Manipori has an area of 48 square miles. It is dotted over with wooded islets, and numerous peninsulas and fairy-like coves adorn its margin. Te Anau is 694 feet above sea level, and Manipori 597.

Lake **McKerrow** in the Hollyford Basin, is only a few feet above sea level, and is connected with the sea by a navigable river.

The west side of the island presents very few plains. Along a great part of Westland a flat generally wooded

belt extends, of considerable width in the north, but narrowing southwards. The principal parts are :—

Martin Bay Settlement (west of Otago); Jackson Bay Settlement, Okarito Plain, and the Kokatahi and Hokitika Valley in Westland.

Lake **Brunner**, in the basin of the Arnould, a tributary of the Grey.

Lakes **Arthur** and **Howick** in the Upper Buller Basin. **Karamea** Plain, west of the Tasman Mountains.

PLAINS, DOWNS, AND LAKES OF THE NORTH ISLAND.

The **Thames**, **Piako**, and **Waitoa** rivers flow through a large plain of swampy ground, which when drained will form excellent land.

Kaingaroa Plateau, in the Upper Rangitaika Basin, a bare tract, with light soil, sloping eastwards.

Lakes **Tarawera**, **Rotorua**, **Rotoiti**, and **Rotomahana**, south of the Bay of Plenty. The district containing these lakes is one of the most wonderful and marvellous in the world. It is part of the great volcanic belt of the North Island, which stretches from Tongariro, a distance of 150 miles, to White Island (Bay of Plenty). Most of this belt, about 25 miles broad, shows unmistakable evidence of the volcanic fires that smoulder below, in its continuous and intermittent geysers (Puias), which all but rival those of Iceland and the Yellowstone River; holes, sending out jets of steam (Ngawhas); cisterns of hot water forming natural baths; tepid lakes and streams; and miniature mud volcanoes. Lakes **Rotorua** and **Rotomahana** present special attractions to visitors. The beautifully coloured white and pink terraces of Rotomahana (warm lake) have been formed by gigantic Puias situated on the sides of the low hills that slope down to the lake. The hot

waters overflowing from the Puias have in the course of ages gradually deposited thick masses of siliceous rock, extending in a fan shape to the margin of the lake. The terraces contain crescent-shaped basins filled with water, very hot at the top, where they are fed by the boiling Puias, but becoming gradually cooler as you recede from them. The water in the basins is of the most exquisite turquoise blue. The white terrace is rough like coral, but the pink one is as smooth as polished marble, and affords delightful baths. The hot springs possess great healing properties, and the district is likely to become the sanatorium of the Australian Colonies. Similar volcanic phenomena occur at Whale and White Islands in the Bay of Plenty, and at the north end of Lake Taupo, while hot springs are met with in various parts of Auckland, those at Waiwera being only 24 miles from the capital.

Opotiki District south of the Bay of Plenty.

Patutahi District west of Poverty Bay.

Lake Waikari in the Wairoa Basin. From Hawke Bay a succession of plains stretches in a south-west direction across the North Island to the Rimutaka Range near Wellington Harbour. These are the extensive and very fertile Ahuriri Plain, south-west of Hawke Bay; the Ruataniwha Plain, in the Tukituki Basin; Forty-Mile Bush, and the Wairarapa Plain, east of the Tararua Mountains, and terminating at Cook Strait.

The **Wellington West District** comprises a splendid belt of flat and undulating country, extending from the Patea River to the Paikakariki Hills. It is about 20 miles in average breadth, getting wider towards the north, and is intersected by the lower basins of the rivers flowing west. It contains a large area of pastoral and rich agri-

cultural land, particularly in the lower basins of the Manawatu, Rangitikei, Whanganui, and Waitotara.

The **Patea** and **Waimate Plains** in the south-east of Taranaki together constitute a tract of country unsurpassed in New Zealand for beauty and fertility.

Murimutu, Rangipo, and Taupo Plains, form an extensive branching central plateau, and contain the sources of the **Waikato** and **Whanganui**. Like the inland parts of Taranaki, these central plains are in the occupation of the natives and little explored. The soil, derived principally from pumice-stone and scoria ash, is of a poor character.

The **Middle and Lower Waikato Plains** lie along the **Waikato Basin**, and contain large areas of fertile agricultural land. Extensive swamps occur between the **Waipa** and the **Waikato**, which will yield most productive soil when drained.

Lake Taupo in the Upper **Waikato Basin**, 1,250 feet above sea level. Its area is about 250 square miles.

Albert Land District, east of **Kaipara Harbour**. **Keri-Keri Plain** west of the **Bay of Islands**.

RECAPITULATION OF LAKES.

IN SOUTH ISLAND.

Lakes **Arthur**, **Howick**, **Brunner**, **Sumner**, **Ellesmere**, **Coleridge**, **Heron**, **Tekapo**, **Pukaki**, **Ohau**, **Hawea**, **Wanaka**, **Wakatipu**, **McKerrow**, **Te Anau**, **Manipori**, **Waiholo**, and **Waipori**.

IN NORTH ISLAND.

Lakes **Rotorua**, **Rotoiti**, **Rotomahana**, **Tarawera**, **Taupo**, **Waikari**, and **Wairarapa**.

THE PROVINCIAL DISTRICTS.

MARLBOROUGH.

TOWNS.

Pelorus Sound :—**Havelock**, with considerable timber trade.

Queen Charlotte Sound :—**Picton**, the chief seaport of the district, approached from the east by the picturesque Tory Channel. It has considerable timber trade, and is connected by railway with Blenheim.

Wairau Basin :—**Renwicktown** and **Blenheim**. The latter is the chief town of the district. It is accessible to ships of small tonnage, and is liable to damaging floods.

East Coast :—**Kaikoura**, centre of a small agricultural and an extensive pastoral district.

DESCRIPTIVE NOTICE.

The Marlborough Provincial District has an area of about 3,000,000 acres, of which half is suitable for pastoral settlement, and some 250,000 acres for agricultural cultivation. It was separated from Nelson, and made an independent province in 1859. The district is very mountainous, the flat and undulating portions lying near the South Coast, and in the valleys and lower basins of the rivers. Extensive forests clothe the low country and hill slopes north of the Wairau. The scenery in the Sounds is at once grand and picturesque. Most of the land is under pastoral occupation, but farming is on the increase. Gold in reefs and alluvial deposits occurs in the area north of the Wairau, especially in the Pelorus Basin. The chief production is wool, but timber and tallow are also important. Hops are grown successfully in various parts. Mullet or her-ing fishing is carried on in the Sounds.

NELSON.

TOWNS.

Tasman Bay :—**Wakapuaka**, the terminus of the Australian and New Zealand submarine telegraph cable. **Nelson**, chief town of the Provincial District, on a sheltered harbour, 150 miles from Wellington. It has a museum, a good College, an excellent supply of pure mountain water, and is hemmed in by a semicircle of lofty hills. Stoke is its chief suburb. **Richmond**, centre of the fertile Waimea district. **Motueka**, centre of a flourishing agricultural district.

Golden Bay :—**Takaka**, with considerable timber trade ; **Collingwood**, centre of a district containing gold, silver, iron, and coal.

Buller Basin :—**Lyell**, centre of a quartz and alluvial mining district. **Reefton** (on the Inangahua), an important town, situated amidst extensive quartz mines ; **Westport**, on the coast, a thriving seaport. Its harbour is the best on the West Coast to the north of Milford Sound. A railway runs north for twenty miles, opening up the immense coal deposits of the Waimangaroa and Ngakawau districts.

West Coast :—**Charleston**, a gold-field centre.

Grey Basin :—**Ahaura** ; No Town ; **Brunnerton**, with valuable coal mines, joined by railway to Greymouth ; **Cobden**, opposite Greymouth.

DESCRIPTIVE NOTICE.

Nelson has an area of 7,000,000 acres, of which only a small portion is fit for cultivation. The first settlement was made in 1841, under the auspices of the "New Zealand Company." It was constituted a province under "*The Constitution Act*," 1852,

and originally embraced Marlborough. The district is extremely rugged and mountainous. The chief tracts suitable for cultivation and close settlement lie in the Waimea and Tasman Bay districts, in the plains in the Buller Basin, and in the Amuri district. The last contains a large extent of excellent flat and undulating land, but, from its isolation and distance from a harbour, it is still under pastoral occupation. Wool and minerals constitute the chief resources of the province. Most of the western side forms a vast gold field; and in the valleys of the Buller and the Grey, as well as on the West Coast, a very large mining population is settled. Quartz-mining is largely carried on, and promises to be a permanent source of employment and wealth. The most extensive and valuable coal fields in New Zealand are found near the West Coast. The coal is of excellent quality for all purposes. The beds are chiefly worked at Brunnerton on the Grey, and at Waimangaroa and Ngakawau north of Westport. Iron and coal in quantity occur together near Collingwood, and the Para-Para iron mines will, at no distant date, be worked to advantage. Large forests occur in the northern and western parts of the province, and a considerable timber trade is carried on from the Takaka district. Gold, coal, and wool are the only productions largely exported. The minor productions are hops, dairy produce, leather, flax-fibre, and fruits. The mulberry, and most European fruit trees, thrive well. The climate in the Blind Bay district is considered the finest in the South Island. The entire northern slope is well sheltered by a semicircle of lofty hills. On the west the climate is wetter, colder, and more boisterous.

CANTERBURY.

TOWNS.

Kowai Basin :—Leithfield.

Ashley Basin :—**Rangiora**, with extensive flour mills.

Waimakariri Basin :—**Oxford**, with important timber trade; Woodend; **Kaiapoi**, accessible to small vessels and steamers.

Avon Basin :—Christchurch, chief town of the Provincial District, situated on the eastern side of the plain. It contains numerous fine buildings, large and commodious schools, two colleges, a very fine museum, a public library, and well-kept public parks and recreation grounds. Brewing, tanning, and iron and brass founding are the principal industries. An abundant supply of water is afforded by hundreds of Artesian wells. The chief suburbs are Addington, St. Albans, Avonville, Sydenham, and Papanui. Addington has extensive railway workshops.

East Coast :—Lyttelton, on Port Cooper, the seaport of Christchurch, with an excellent harbour, sheltered by a breakwater. The railway here passes through the Moorehouse Tunnel, 2,838 yards in length. **Akaroa**, on the splendid harbour of the same name, exports fruit and dairy produce.

Lake Ellesmere District :—Doyleston north, and **Leeston** and **Southbridge** south-west of Lake Ellesmere.

Ashburton Basin :—Ashburton, Ashburton Forks.

Opihi Basin :—Geraldine and **Temuka**.

East Coast :—Timaru, an important and growing town, centre of South Canterbury. It has a fine public school. There is no natural harbour; but a breakwater of massive blocks of concrete is in course of construction.

Waiho Basin :—Waimate.

Nearly all the towns in Canterbury are centres of agricultural and pastoral districts.

DESCRIPTIVE NOTICE.

Canterbury Provincial District occupies the eastern slope of the Southern Alps, from Nelson to Otago, and has an area of 8,693,000 acres. Of this area, 2,500,000 acres form a vast plain,

sloping gently from the mountain ranges to the sea, and yielding excellent natural pasture. The first immigrants arrived in 1850, under the auspices of "The Canterbury Association, for forming a settlement in New Zealand." It was originally intended that the settlement should have a very intimate connection with the Anglican Church, but this exclusive arrangement was soon abandoned. It was created an independent province by "*The Constitution Act*" of 1852. Unlike the other provinces of the South Island, Canterbury contains no gold fields. Its pastoral and agricultural resources are, however, so valuable as to have induced steady settlement, in spite of the golden attractions of its neighbours. The great "Plains" afford soil of unequal quality, many portions being arid and shingly; but large tracts, especially in the northern and southern districts, are eminently fitted for tillage. Besides the plains there are extensive undulating downs, such as those around Timaru and north of the Ashley, very suitable for cultivation. The more arid parts of the plains and the hill and mountain slopes are used for depasturing sheep. The valleys of Banks Peninsula possess a most fertile soil, and a great deal of cheese-making and dairy-farming is there carried on. The chief grain-producing districts are those of Eyreton and Kowai, in the north; Courtenay and Ellesmere, in the centre; and Geraldine and Timaru, in the south. Canterbury is very scantily supplied with timber, the plains being naturally treeless, though patches of trees planted there thrive well. The chief forests are:—on Banks Peninsula, especially at Little River; Harewood Forest, north of Oxford; Alford Forest, between Mount Somers and the Ashburton; and patches at Mount Peel, Rangitata, and Waimate. "Bushes" of birch—properly *Fagus*, a true beech—are common in the mountain valleys, but they are inaccessible and of little value. Extensive seams of brown coal (lignite) occur along the ranges bordering the plains, and in other parts. These are chiefly worked at Malvern and Ashburton. The chief productions are wool, grain, and bread-stuffs; tallow, hides, skins, leather, preserved meats, and dairy produce, are the principal minor productions. The Trunk Railway traverses

the length of the district, and sends off numerous branches, chiefly to the west.

OTAGO.

TOWNS.

East Coast :—Oamaru, a thriving, handsome, stone-built town, centre of a very fertile district, carrying on a large grain and flour trade. Its harbour is naturally an open roadstead, but a great part of it is well sheltered by a massive concrete breakwater. Near it is found the well-known Oamaru and Kakanui stone, which is largely exported.

Kakanui Basin :—Herbert.

East Coast :—Hampden and Moeraki (with a fairly sheltered harbour).

Shag Basin :—Palmerston, an important agricultural centre.

East Coast :—Waikouaiti and Blueskin.

Otago Harbour :—Port Chalmers, the seaport of Dunedin, with a good harbour, a large dry-dock, fine engineering works, and commodious wharves. **Dunedin**, chief town of the Provincial District, and the first commercial city in the colony. It possesses many fine buildings, a University, High Schools, a good Museum, and an excellent Athenæum. It is the seat of numerous important industries, the chief of which are iron and brass founding, brewing, tanning, and the manufacture of woollen fabrics and clothing. The harbour is being deepened so as to admit ocean-going vessels to docks near the city. The chief suburbs are Ravensbourne, N. E. Valley, Roslyn, Mornington, Caversham, Forbury, and Anderson's Bay.

East Coast :—Green Island, with important collieries.

Taieri Basin :—**Naseby** and **Waipori**, gold-mining centres ; **Outram**, **Mosgiel** (with large woollen factory), and **Greytown**, all in the Taieri Plain.

Tokomairiro Basin :—**Milton**, in the centre of the plain.

Clutha Basin :—**Kingston** and **Queenstown**, on Lake Wakatipu ; **Arrowtown**, **Cromwell**, **Clyde**, **St. Bathans**, **Alexandra**, **Roxburgh**, **Lawrence**, **Waitahuna**, all gold-mining centres ; **Tapanui** (centre of a rich agricultural district), **Balclutha**, and **Kaitangata** (with important collieries).

Mataura Basin :—**Switzers (Wakaia)**, a mining centre, **Gore**, **Mataura**, and **Wyndham**.

South Coast :—**Campbelltown**, on Bluff Harbour, southern terminus of the Trunk Railway, and seaport of **Invercargill**.

Waihopai Basin :—**Invercargill**, the chief town of Southland or South Otago. It is an important railway and trading centre, and has High Schools for boys and girls, and a handsome Athenæum.

Oreti Basin :—**Lumsden**, and **Winton**.

Aparima Basin :—**Riverton**, with a good harbour for small vessels.

DESCRIPTIVE NOTICE.

Otago has an area of 15,500,000 acres, half of which is fit for agricultural cultivation, while 1,500,000 acres are under forest. The first immigrants, led by Captain Cargill, landed at Otago Harbour in 1848. The settlement was promoted by the Free Church of Scotland, but the denominational character of its original design was abandoned, in consequence of the breaking up of "The New Zealand Company." "*The Constitution Act*" of 1852 created Otago an independent province. In 1861 Southland was separated from it, but the two provinces were reunited

in 1870. Until the discovery of gold, in 1861, progress was steady but slow. That event gave an immense impetus to immigration, foreign and inland trade and settlement, and effectually opened up the more remote and hitherto all but unexplored parts of the interior. Since 1861 Otago has made rapid but solid progress, and its vast agricultural, pastoral, and mineral resources have undergone continuous development.

The surface is broken by numerous mountain chains and hilly ranges, traversing the country for the most part in a north and south direction. The level and fertile tracts lie chiefly on the east and south sides. The largest and most valuable blocks of arable land lie in the district around Oamaru, in that around Palmerston and Wakouaiti, in the Taieri, Tokomairiro, and Clutha Plains, in the extensive Downs between the Clutha and the Mataura, and in the wide Southland Plains, stretching from the Mataura to the Waiau, and extending far to the north. Wheat grows well, especially in the north; but oats and barley are more generally cultivated in the southern parts. The hilly and mountainous tracts, and the dry upland plains, are used for depasturing sheep. The mineral resources are of great importance. Gold fields cover large tracts of the Upper Basins of the Taieri and Clutha Rivers, and occur in portions of the Mataura Basin and elsewhere. The alluvial diggings were originally very rich, and easily worked, but now the ground is poorer, and large supplies of water for sluicing are required to secure payable returns. Quartz reefs have been discovered in various quarters, and have been opened up at Bendigo (near Cromwell), Waipori, and Macetown (near Arrowtown). In some cases the veins have proved very rich, and quartz-mining will, doubtless, be an important industry at no distant date. The yield of gold from alluvial diggings has been steadily decreasing for some years. Coal of inferior quality (lignite) occurs in many parts of the district, generally in recent deposits. The Shag Point, Green Island, Tokomairiro, Kaitangata, Wairaki Downs, and Gibbston beds are worked on a considerable scale. Extensive forests are met with on the south-east, south, and west coasts, but most of the interior is treeless. The principal forests are

north-east of Dunedin, a wide belt skirting the coast from the Clutha to the Mataura, Seaward Bush, Forest Hill Bush, and some minor "bushes" in Southland, on the Longwood Range, and in the tract from the Waiau to the West Coast. The chief inland "bushes" are near Tapanui, in the Pomahaka Valley, east of the Umbrella Range, and at the heads of Lakes Wakatipu and Wanaka. Charred logs scattered over the ranges of the interior indicate that they were recently forest-clad. Tree planting on a large scale has as yet received little attention. Wool, gold, and grain are the principal productions. Tallow, preserved meats, hides and skins, flax, building-stone, and ales, are the chief minor productions. Railways traverse the whole length of the district, and are being rapidly extended. The native population is very small, their chief settlements being at the end of Otago Peninsula, and Ruapuke Island, in Foveaux Strait. The climate is variable, temperate, and rather wet and windy. In the interior the summers are hot and dry, but winter brings heavy snows and severe frosts.

WESTLAND.

TOWNS.

Grey Basin :—**Greymouth**, an important seaport and gold-field town. Seven miles up the river valuable coal mines occur. It has a bar harbour.

Teremakau Basin :—Kumara, a few miles from the coast.

Waimea Basin :—Stafford.

Hokitika Basin : **Kanieri** and **Hokitika**, the latter the chief town of Westland. It depends on the gold fields, and has a bar harbour, which is difficult of access in rough weather.

Totara Basin :—**Ross**.

West Coast :—Okarito and Jackson Bay Settlement.

Almost all the towns in Westland are centres of gold-digging districts.

DESCRIPTIVE NOTICE.

The Provincial District of Westland occupies the west slope of the Southern Alps, forming a strip 200 miles in length by 30 in average breadth. Its area is 3,045,700 acres, two-thirds being "bush." It was separated from Canterbury, and became an independent county in 1867. In 1874 it was made a Provincial District. The greater part of the flat and undulating land, and the mountain sides, to a great height, are covered with dense forests. When the flats bordering the coast, and those between the outlying hills and the main range, are cleared, they will yield considerable areas of good arable land. Westland may be described as a vast alluvial gold field. Gold was first discovered in 1864, and for several years thereafter the county contained a very large mining population, and exported enormous quantities of the precious metal. The yield, though greatly diminished, is still very considerable, and the diggings will long afford remunerative employment to large numbers of miners. Along nearly all the rivers and streams, and the terraces between them, and in many parts along the beach, gold is found in payable quantities. The great obstacle to the working of the auriferous deposits is the difficulty of obtaining sufficient supplies of water; but this is being overcome by the construction of large and costly water races. Silver ore of excellent quality has been found abundantly at Mount Rangitoto (Totara District). Very valuable seams of coal occur in the Grey Basin, at the junction of the Grey with the Arnould. These beds are now being worked, but the export of coal on a large scale is hindered by the bad harbour at Greymouth, which is closed against large vessels by a shifting bar. It is, however, being improved by the erection of harbour works. There is but little agricultural and pastoral settlement in Westland, and most of the necessities of life are imported from the neighbouring provinces and Australia. There is a good and most picturesque road to Canterbury by way of the Teremakau Valley. Arthur's Pass, and the Waimakariri Valley.

Gold, timber, and coal are the chief productions.

AUCKLAND.

TOWNS.

Doubtless Bay :—**Mangonui**, has an excellent harbour and large timber trade.

Whangaroa Harbour :—**Kaeo**, Whangaroa exports large quantities of kauri timber.

Bay of Islands :—**Russell**, a seaport with manganese mines in the neighbourhood ; **Kawakawa** has a splendid coal seam, which supplies a large portion of the fuel used in the province.

Whangarei Harbour :—**Whangarei**, with coal and manganese mines.

East Coast :—**Mangawai**, with ship-building and vineyards ; **Warkworth**, centre of **Mahurangi** district ; **Waiwera** (hot springs) the watering-place and sanatorium of **Auckland**.

Waitemata Harbour :—**Auckland**, chief town of the Provincial District, beautifully situated on the southern shore of the harbour. Its harbour is one of the finest in the Australian Colonies, and has two extensive wharves, and a large graving-dock. Its commercial position is unsurpassed in the colony. The **Waitemata** and **Manukau** ports command the trade with **America** and the **Fiji** and **South Sea Islands** on the one hand, and with **New South Wales** and the **Southern Provinces** on the other. The city contains many fine buildings. It possesses a museum, a governor's residence, and many public institutions. There is a large shipping trade, and important ship-building yards. The **Waikato Railway** connects it with the central region. Soap-making, brewing, tanning, glass-making, &c., are among the chief industries. The suburbs are :—The **North Shore**, **Newton**, **Parnell**,

Remuera, and Newmarket. Epsom, south of Auckland.

Tamaki Creek :—**Panmure**, with important tannery ; Howick.

Firth of Thames :—**Grahamstown** (including Shortland), a large town, centre of the Thames gold field. Many of the quartz mines in the district have proved of extraordinary richness. A stupendous pump, costing £50,000, drains the low levels.

Hauraki Gulf :—**Kapanga**, chief centre of the Coromandel gold field.

Bay of Plenty :—**Tauranga**, on Tauranga Harbour ; a rising town, centre of a flourishing district. It is the nearest port to the Hot Lake country. **Ohinemutu**, on Lake Rotorua, is south of Tauranga. Opotiki, centre of a fertile and well-timbered district.

Poverty Bay :—**Gisborne**, centre of a rich agricultural district, with an exposed harbour. Ormond, inland.

Waikato Basin :—**Cambridge**, near the boundary of the confiscated lands, and accessible to small steamers ; **Hamilton**, centre of a fine district, on both banks of the river ; **Te Awamutu** and Alexandra, in the Waipa Basin ; **Ngaruawahia**, at the junction of the Waikato and Waipa Rivers, a picturesque township, once the residence of the Maori king ; Mercer, with considerable river-steamer trade.

Manukau Harbour :—**Onehunga**, an important seaport, six miles from Auckland, with which a railway connects it ; **Otahuhu**, Papakura, and Drury, on the south road ; Waiuku, on the south-west corner of the harbour.

Kaipara Harbour :—**Helensville**, joined by railway to Riverhead on Waitemata Harbour ; Port Albert.

Wairoa Basin :—**Dargaville**.

DESCRIPTIVE NOTICE.

Auckland, the largest of all the Provincial Districts, has an estimated area of 16,500,000 acres. It was with this part of the islands that Europeans first came into permanent contact. The pioneer settlements were not made under any definite scheme, but grew gradually out of trade relations with the natives. The earliest settlement and the original seat of government were at the Bay of Islands, which was frequented by whalers and by small vessels from Sydney. Here the famous treaty of Waitangi was concluded, in 1840, by which the sovereignty of the islands was ceded to the Queen of Great Britain, while the Imperial Government recognized the native title to the soil, and the aborigines accepted the British rule. In 1841 the capital of New Zealand was established at Auckland, the site having been selected by Captain Hobson. For years settlement made rapid progress in the Peninsula and towards the Waikato, under the fostering protection of the British forces at the command of the Governor. The expansion of settlement was arrested by the outbreak of the Waikato war, in 1863. This arose from attempts by the Waikato and Taranaki tribes to make the chief Potatau king over all the tribes (the king movement), and from disputes about land sales. During the war many of the outlying settlers had to leave their lands for a time, and take refuge in Auckland. In 1869 the natives gave up the struggle, and peace was concluded on terms favourable to the colonists, more than a million acres of land having been confiscated. The stormy days of the province had now passed, and settlement began to expand with growing confidence and rapidity, while friendly relations with the natives brought about the acquisition of large blocks of land, which are being used for agriculture or pasturage.

The natives still own more than 10,000,000 acres, including nearly the whole of the eastern and southern central parts, about which comparatively little is known. The principal districts occupied more or less closely by Europeans are the Peninsula, Auckland, and Manukau districts, the Lower Basin of the

Waikato (including the Waipa), parts of the Piako, Waitoa, and Thames Valleys, and the Tauranga, Opotiki, and Poverty Bay districts. Some of these parts have only a scattered European population, as the purchased blocks frequently lie amid native lands. The want of good roads has greatly retarded the progress of the province. The Peninsula has suffered less from this disadvantage, because most of it is accessible by water. There is an excellent military road to the Waikato, and a railway is now completed to the confiscated boundary. The parts occupied by Europeans consist of flat, undulating, and broken land of all qualities. In the Peninsula and Manukau districts there are considerable areas of excellent land, but much of it is very indifferent. Soil of the finest description is found in the Waikato (Lower) and Waipa Basins (now extensively settled), and in the Piako and Thames Valleys (as yet but sparingly settled), all of which contain large swamps, which drainage will convert into excellent land; also, in the Bay of Plenty settlements and in the Poverty Bay district.

Agriculture, though not prosecuted very generally or on a large scale, is extending, and Auckland should soon cease to depend on Otago and Canterbury for its supplies of grain, flour, and potatoes. The greater part of the improved land is used for grazing cattle and depasturing sheep. The natural pasture is poor, well-grassed country, like the Southern Provinces, occurring sparingly, chiefly in the Poverty Bay and East Cape districts.

Timber is one of the chief productions, and the province possesses unrivalled forests, although wood is rather scarce in the Waikato and Paiko districts. The most valuable timber tree in New Zealand is the magnificent kauri pine, which does not grow south of a line from Tauranga to the Waikato Heads. Large forests of this splendid pine occur in the Peninsula (especially around Kaipara Harbour), at Tairua, and in other parts of the province. The other valuable native timbers are also plentiful. Kauri is very largely exported to the Southern Provinces and the Australian Colonies. Kauri gum (used in making varnish) is also an important article of export. It is

found by digging in the open ground formerly covered by kauri forests, and chiefly in Auckland Peninsula.

The gold-fields of the province are situated on the Coromandel Peninsula, and though small in extent, they have yielded exceedingly rich returns. In one year the Caledonian mine produced ten tons of gold, and divided £527,000 among the shareholders. The chief divisions are the Coromandel, the Thames, and the Ohinemuri fields, the last being recently opened up. It will take many years to exhaust the rich reefs that traverse the Coromandel Range, and this locality will, no doubt, long support a large mining population.

Valuable beds of coal occur in various parts. They are extensively worked at Kawa-Kawa (Bay of Islands), and in Lower Waikato (Rangiriri), and on a smaller scale at Whangarei, and the west coast of the Firth of Thames. Manganese is worked near Russell, and at Whangarei; while copper was formerly worked at Kawau and Great Barrier Islands. Iron-sand and iron-stone occur, but they have not yet been turned to account. Ship-building is carried on to a considerable extent at Auckland and various other harbours in the Peninsula, kauri being the timber chiefly used. Hitherto small vessels principally have been built, but the industry gives every promise of developing to large dimensions.

Rope-making, soap-boiling, tanning, and candle-making, are among the minor industries.

The chief productions are timber, gold, wool, manganese and kauri gum, hides and flax-fibre.

HAWKE'S BAY.

TOWNS.

Wairoa Basin :—**Clyde** (Wairoa).

Hawke Bay :—**Napier**, the chief town of the district, has a considerable coasting trade, and a harbour which vessels of small size can enter. Large vessels lie with safety in the roadstead.

Tutaekuri Basin :—Taradale and Meanee.

Ngaruroro Basin :—Hastings, Havelock, and Clive.

Tukituki Basin :—**Abbotsford** (Waipawa), Waipukurau, and **Kaikora**.

Porangahau Basin :—Porangahau.

Upper Manawatu Basin :—Norsewood, and Danevirk, Scandinavian settlements, and **Woodville**.

DESCRIPTIVE NOTICE.

Hawke's Bay was so named by Captain Cook, in honour of Sir Edward Hawke, the then First Lord of the Admiralty. Its area is 2,840,000 acres. The settlement of the district was less regular than in any other part of New Zealand. It formed part of the Wellington Province under "*The Constitution Act*," and was created a separate province in 1858. The first missionaries arrived here in 1843, but the town of Napier was not laid out till 1855. Since that time the district has continued to make steady progress. From the Ruahine Range to the coast the country shows a gradual but somewhat irregular slope. This slope contains two important and very fertile plains;—the Ahuriri, west of Napier, 80,000 acres in extent; and the Ruataniwha, near the sources of the Tukituki. The southern portion consists mainly of undulating country, partly broken by the Puketoi Range, with patches of bush on the hills. The extensive forest called the Seventy-Mile Bush occupies part of the south-west of the province. It contains several large clearings, has an excellent soil, and unlimited supplies of the most valuable native timbers. The district north of Napier is rougher and more broken than to the south, and is also less fertile. The whole is well watered by numerous streams, and in the Ahuriri Plains Artesian wells are easily constructed. Until recently sheep-depasturing was almost the only industry; but, as the country is getting opened up by roads and railways, agricultural settlements are becoming more numerous and important. For this the richness of the soil renders it very suitable. Hops, vines, and beet grow luxuri-

antly, and may yet become important articles of production. The climate is rather dry and hot in summer, but, on the whole, equable and salubrious. Sheep thrive very well, and their wool is marked by such a degree of evenness as to render it probable that Hawke's Bay will become the breeding-ground of New Zealand. All European fruits grow luxuriantly. In summer, land and sea breezes prevail with considerable regularity. There are still large numbers of natives, who grow maize and potatoes extensively. Large tracts of valuable pastoral country, owned by them, are leased to Europeans. Many of the natives are consequently in receipt of very fair incomes.

WELLINGTON.

TOWNS.

Ruamahanga Basin :—**Mauriceville**, **Masterton**, **Carterton**, **Greytown** (centre of the Wairarapa district), and **Featherston**.

Hutt Basin :—Lower Hutt.

Port Nicholson :—**WELLINGTON**, chief town of the Provincial District, and the political capital of New Zealand. It is situated on the western corner of Port Nicholson, filling up a narrow tract between the hills and the sea. Much of the site has been reclaimed from the bay. It contains some fine buildings, mostly of wood, brick and stone ones being considered somewhat unsafe, from the prevalence of slight earthquakes. It became the seat of the general government in 1865, in consequence of its central position. Here are the Houses of Parliament, the ordinary residence of the Governor, and the head offices of the various departments of the Civil Service. The city has a fine commercial position and a magnificent harbour, but is cut off by mountain barriers from the fertile parts of the district. It has a good museum, a college, a patent

slip, foundries, breweries, and other industries. The chief suburbs are Kilbirnie, New Town, Kaiwarrawarra, Karori, and Makara.

West Coast :—Porirua on Porirua Harbour; Otaki (a village, chiefly native).

Manawatu Basin :—Feilding (on the Oroua); **Palmerston North**, a rising municipality, centre of a fine timber and agricultural district; **Foxton**, a seaport and railway terminus, rapidly increasing.

Rangitikei Basin :—**Marton**, Bulls, Turakina.

Whanganui Basin :—**Whanganui**, a seaport and important town, centre of an extensive and fertile district. It was fortified during the native disturbances, and has a considerable coasting and inland trade. **Waverley** (Wairoa), twenty miles west of Whanganui, centre of a rich district.

DESCRIPTIVE NOTICE.

Wellington Provincial District occupies the southern portion of the North Island, and has an area of 7,200,000 acres, of which about half may be considered agricultural land. The first settlement was made in 1840, under the auspices of "The New Zealand Company" of London. It was created a province by "*The Constitution Act*," 1852, and, until 1858, included Hawke's Bay District. The district is traversed by a nearly central wooded mountain range, which divides it into a western slope and a central basin, while a hilly tract, partly open, lies towards the east coast. Along the greater part of the west coast there extends a belt of level and undulating land of great width towards the north, but gradually narrowing southwards. Most of this tract is open and in its natural state, covered by tall fern; but portions, as in the Lower Manawatu Basin, are wooded. The districts around Patea and Whanganui are said to contain the finest land in the colony, while most of the western slope possesses good soil, and is well fitted for pastoral

and agricultural settlement. A wide belt of sand-dunes fringes the west coast, and keeps encroaching on the land. The central area comprises the Ruamahanga Basin and part of that of the Manawatu. The Wairarapa Valley (Ruamahanga Basin), one of the earliest and most thickly settled districts in the province, contains much fertile open land, skirted by dense bush. The eastern portion is under pastoral occupation. Agricultural cultivation is extensively carried on in the Wairarapa Valley, and in parts along the western slope, particularly in the Whanganui and Patea districts. With the exception of the open land already mentioned, most of the province is wooded. The forests abound in most of the valuable native trees, and afford inexhaustible supplies of timber. Large clearings have been made in the Manawatu Basin, as at the Forty-Mile Bush, and the Feilding Block, and the bush land possesses an excellent soil. The export of sawn timber is extensive, chiefly from the Lower Manawatu, but large quantities are brought over the Rimutaka to the metropolis. Wellington has no mineral resources worth mentioning. Agricultural and pastoral pursuits, and the hewing and sawing of timber, are the chief occupations of the rural population. Wool, timber, and grain are the chief productions. Tallow, hides, skins, preserved meats, flax-fibre, and other articles, are produced on a smaller scale. Communication with the interior is somewhat difficult, owing to the mountains that cut the city off from the back country. Two remarkable roads of costly and difficult construction join Wellington with the Wairarapa Valley and the western slope. The Northern Railway, which passes through the top of the Rimutaka, by a long tunnel at a height of 1,130 feet, has greatly reduced the traffic on these dangerous roads. Communication with the Whanganui district is carried on chiefly by sea. The native population is considerable, though the Maories are rapidly decreasing in the vicinity of European settlements. They own large tracts of country, including the whole of the northern inland parts.

TARANAKI.

TOWNS.

Raleigh, on the Waitara, a railway terminus.

Tikorangi, Manutahi, and Huirangi, prosperous farming settlements inland from Raleigh.

New Plymouth, chief town of the Provincial District, north of Mount Egmont. It possesses no natural harbour, but an artificial one is being constructed. Oakura and Omata, villages north-west of Mount Egmont.

Bell Block is a village and large farming district north of New Plymouth. **Inglewood**, a flourishing village, with large saw-mills, east of New Plymouth.

Opunake, south of Mount Egmont.

Carlyle, near the mouth of the Patea, centre of a rich district.

Hawera, north-west of Carlyle, near the Waimate Plains.

DESCRIPTIVE NOTICE.

The area of Taranaki Provincial District is 2,137,000 acres, but only a small proportion of it is settled. The first immigrants arrived at New Plymouth in 1841, under the auspices of "The Plymouth Company." The progress of the settlement has been greatly retarded by the difficulty of acquiring land, and by the outbreak of the native war. The majestic cone of Mount Egmont forms the most striking feature in the district, and presents almost the same appearance from every point of view. The surface is for the most part undulating, and is well watered by a profusion of small streams. The soil consists of a fertile, light, friable loam, with a porous subsoil, and is divided locally into three sorts, each marked by a characteristic vegetation. First, there is a strip along the coast, covered with light fern and scattered tufts of grass, and often plentifully mixed with the iron-sand common in this part of New Zealand. The

second sort forms extensive tracts adjoining the first, and is densely covered with tall fern, tutu, and toi-toi grass. The soil is of vegetable mould, matted together by fern-root, with a light yellow subsoil of great depth. On land of this kind most of the farming settlements are situated; but the soil is sour when first broken up, and requires considerable fallowing and exposure before it can be advantageously cropped. The third sort is "bush," or forest land, which occupies large areas, approaching to within two to five miles of the sea, and extending a considerable distance inland. The forests contain most of the native timber trees. The climate, though windy, is equable, and one of the best in New Zealand, floods and droughts being almost unknown. English fruits grow everywhere in profusion. The native race numbers about 2,760, and is gradually diminishing. At Henui, a suburb of New Plymouth, the New Zealand Iron and Steel Company have erected smelting works, to utilize the iron-sand so plentiful on the coast, but unexpected difficulties have caused operations to be meanwhile suspended.

THE COUNTIES.

COUNTIES OF THE SOUTH ISLAND, WITH THE TOWNS AND VILLAGES IN THEM.*

1. **Sounds** County (west of Cook Strait).—Port Underwood.
2. **Marlborough** County (south of Sounds).—**Havelock**, **Picton**, **Tua Marina**, **Renwick**, and **Blenheim**.
3. **Kaikoura** County (south of Marlborough).—**Kaikoura**.
4. **Cheviot** County (south of Kaikoura).—Wholly pastoral.
5. **Amuri** County (west of Cheviot).—**Waiau**. Almost wholly pastoral.

* The municipalities, though mentioned under the Counties where they are situated, are wholly independent as regards local government. Some lie between the boundaries of two or more counties, as in the case of Dunedin.

6. **Ashley** County (south of Amuri and Cheviot).—Amberley, **Rangiora**, Woodend, **Kaiapoi**, Leithfield, Eyreton, and **Oxford**.

7. **Selwyn** County (south of Ashley).—**Christchurch**, **Lyttelton**, Addington, Sumner, Prebbleton, **Lincoln**, Doyleston, Leeston, **Southbridge**, Rolleston, Selwyn, Malvern, Sheffield, and Whitecliffs.

8. **Akaroa** County (east of Selwyn).—Pigeon Bay, **Akaroa**, and Little River.

9. **Ashburton** County (south of Selwyn).—Rakaia, **Ashburton**, Ashburton Forks.

10. **Geraldine** County (south of Ashburton).—Orari, Winchester, **Geraldine**, **Temuka**, Washdyke, **Timaru**, Albury, Pareora.

11. **Waimate** County (south of Geraldine).—**Waimate**, Makikihi.

12. **Waitaki** County (south of Geraldine and Waimate).—Duntroon, Livingstone, **Oamaru**, Ngapara, Kakanui, Herbert, Hampden, Moeraki.

13. **Waikouaiti** County (south of Waitaki).—**Palmerston**, Macraes, **Waikouaiti**, Blueskin, and **Port Chalmers**.

14. **Maniototo** County (west of Waikouaiti).—Hyde, Hamiltons, **Naseby**, St. Bathans, and Cambrian.

15. **Vincent** County (west of Maniototo).—Ophir (Blacks), Drybread, Alexandra, **Clyde**, **Cromwell**, Bendigo, and Bannockburn.

16. **Taieri** County (south of Waikouaiti).—**Dunedin**, Green Island, **Mosgiel**, **Greytown**, and **Outram**.

17. **Peninsula** County (east of Taieri).—Anderson's Bay, Portobello, and the Kaik (Maori village).

18. **Bruce** County (south of Taieri).—Waiholo, **Milton**, and **Kaitangata**.

19. **Tuapeka** County (east of Taieri and Bruce).—Waipori, **Waitahuna**, **Lawrence**, Blue-Spur, Wetherstones, Dunkeld, **Roxburgh**, and **Tapanui**.

20. **Clutha** County (south of Bruce).—**Balclutha**, Port Molyneux, and Clinton.

21. **Southland** County (west of Tuapeka and Clutha).—Athol, Nokomai, **Wakaia** (Switzers), **Gore**, Mataura, Wyndham, Fortrose, Woodlands, Lowther, **Lumsden**, Winton, Wallacetown, **Invercargill**, and **Campbelltown**.

22. Stewart Island sparingly settled.

23. **Wallace** County (west of Southland).—Otatautau, **Riverton**, and Orepuki.

24. **Fiord** County (west of Wallace).—Rough, wooded country, mostly unoccupied.

25. **Lake** County (west of Vincent).—Kingston, **Queens-town**, Arrowtown, Macetown, Cardrona, and Martin Bay.

26. **Westland** County (on west coast, north of Lake).—Jackson Bay, Weld, Okarito, Bowen, **Ross**, **Kanieri**, **Hokitika**, Stafford, Kumara, and Goldsborough.

27. **Grey** County (north of Westland).—Greenstone, Marsden, **Greymouth**, Cobden, **Brunnerton**, Wallsend, No Town, and Ahaura.

28. **Inangahua** County (inland, north of Grey).—**Reefton**, Hampden, Copleston, and Black's Point.

29. **Buller** County (north-west of Inangahua).—Brighton, **Charleston**, **Westport**, **Lyell**, and Karamea.

30. **Collingwood** County (north of Buller).—**Collingwood**, and Takaka.

31. **Waimea** County (west of Marlborough).—Motueka, Upper Moutere, Appleby, Foxhill, Wakefield, Spring Grove, Hope, **Richmond**, Stoke, **Nelson**, and Waka-puaka.

COUNTIES OF THE NORTH ISLAND, WITH THE TOWNS AND VILLAGES IN THEM.

1. **Mangonui** County (at the north of Auckland Peninsula).—Mangonui, Kaeo.
2. **Bay of Islands** County (south-east of Mangonui).—**Russell**, Waitangi, Kawakawa.
3. **Hokianga** County (west of Bay of Islands).—Hokianga.
4. **Whangarei** County (south of Bay of Islands).—Whangarei, Waipu.
5. **Hobson** County (west of Whangarei).—Tokatoka, Matakoho, Dargaville.
6. **Rodney** County (east of Kaipara Harbour).—Mangawai, Port Albert, Warkworth, Mahurangi, Waiwera.
7. **Waitemata** County (south of Rodney).—**Helensville**, Riverhead.
8. **Eden** County (south of Waitemata).—**Auckland**, **Onehunga**, Newmarket, **Epsom**, Panmure, Remuera.
9. **Manukau** County (south-east of Manukau Harbour).—Howick, **Otahuhu**, Papakura, Drury, Waiuku, Mercer.
10. **Waikato** County (south of Manukau).—**Hamilton**, **Cambridge**.
11. **Coromandel** County (northern part of Coromandel Peninsula).—**Kapanga**, Tokatea, Mercury Bay.
12. **Thames** County (south of Coromandel).—Hastings, **Grahamstown**, Ohinemuri, Tairua.
13. **Piako** County (south of Thames).
14. **Tauranga** County (south of Bay of Plenty).—**Tauranga**, Maketu, **Ohinemutu**, Wairoa.
15. **East Taupo** County (south of Tauranga).—Native

district. Taupo, at the outlet of the Waikato River from the lake.

16. **Whakatane** County (south of Bay of Plenty).—Whakatane, Opotiki.

17. **Cook** County (east of Whakatane).—Waiapu (gives title to the Hawke's Bay bishopric), **Gisborne**, Ormond, Patutahi.

18. **Wairoa** County (north of Hawke Bay).—Clyde, Mohaka.

19. **Hawke's Bay** County (west of Hawke Bay).—**Napier**, Meanee, Taradale, Petane, Hastings, Clive, Havelock.

20. **Waipawa** County (south of Hawke's Bay).—**Kaikora**, **Waipawa**, Hampden, Waipukurau, Wallingford, Porangahau, Norsewood, Danevirk, **Woodville**.

21. **Wairarapa East** County (south of Waipawa).—Pastoral district. Tinui.

22. **Wairarapa West** County (west of Wairarapa East).—**Featherston**, **Greytown**, Carterton, Taratahi, **Masterton**, Opaki, Mauriceville, Alfredtown.

23. **Hutt** County (north of Port Nicholson).—Lower Hutt, Taita, Upper Hutt, Petone, **Wellington**, Makara, Karori, Kaiwarawara, Johnsonville, Porirua, Pahau-tahanui.

24. **Manawatu** County (north of Hutt).—Otaki, **Foxton**, **Palmerston North**, Feilding (Manchester Block), Sanson, Halcombe.

25. **Rangitikei** County (north of Manawatu).—Bulls, **Marton**, Turakina.

26. **Whanganui** County (north-west of Rangitikei).—**Whanganui**, Waitotara.

27. **Patea** County (west of Whanganui).—**Waverley**, **Carlyle**, **Hawera**, Normanby.

28. **Taranaki** County (north of Patea).—Opunake, Oakura, **New Plymouth**, **Raleigh** (Waitara), Manutahi, Tikorangi, **Inglewood**, Stratford.

29. **Kawhia** County (north of Taranaki).—Te Kuiti. A native district.

30. **West Taupo** County (east of Kawhia and Taranaki).—A native district.

31. **Waipa** County (north of West Taupo).—Te Awamutu, **Alexandra**, **Ngaruawahia**.

32. **Raglan** County (north of Kawhia).—Raglan, Port Waikato. District chiefly native.

ISLANDS.

NEAR THE SOUTH ISLAND.

Rabbit Island, at the head of Tasman Bay.

D'Urville Island, north-east of Tasman Bay.

Chetwode and Forsyth Islands, near the mouth of Pelorus Sound.

Arapawa Island, at the mouth of Queen Charlotte's Sound.

Ruapuke and **Dog Islands**, in Foveaux Strait.

Stewart Island, south of Otago.

Solander Island, south-west of Otago.

Resolution and **Secretary Islands**, west of Otago.

NEAR THE NORTH ISLAND.

Kapiti Island, west of Wellington.

White Island, in the Bay of Plenty.

Motiti and Mayor Islands, in the west of the Bay of Plenty.

Mercury Islands, east of Coromandel Peninsula.

Great Barrier Island, and **Little Barrier Island**, at the entrance to Hauraki Gulf.

Waihiki, Ponui, Motutapu, Rangitoto, and **Kawau** Islands, in Hauraki Gulf.

Hen and Chickens Islands, Poor Knights' Islands, Cavalli Island, and Stephenson Island, all east of Auckland Peninsula.

The Bay of Islands is so named from its being studded with a large number of small islets.

The Three Kings Islands, north-west of Cape Reinga.

It is worthy of notice that the east and west coasts present almost no islands. This might be expected from the fact that the New Zealand mountain ranges run north and south. Islands are the hills and mountains of submarine continents, and are naturally found in lines which continue the axes of the main ranges on the adjoining dry land.

OFF ISLANDS.

Chatham Islands, 360 miles east of Banks' Peninsula.

Bounty Islands, 470 miles east of Stewart Island.

Auckland Islands, 180 miles south of Stewart Island.

Antipodes Islands, like the last, a group of barren, rocky islets, 140 miles south-east of Auckland Islands.

Campbell Island, 145 miles south-east of Auckland Islands.

Of the Off Islands, the Chatham Islands alone are inhabited. Several of the others are frequented by whaling and sealing parties.

THE NATIVE RACE.

The native inhabitants of New Zealand, or the Maori (natives), as they call themselves in contrast to the "Pakeha," or "strangers," belong to the Polynesian family, a branch of the great Malay race. They migrated to New Zealand from Hawaiiiki (an unknown isle of the South Pacific; perhaps

Savaii, in the Navigator's Group), not later than the beginning of the fifteenth century, in double canoes, which reached various points on the east coast of the North Island. Some believe that they conquered and enslaved an aboriginal race, called the Moriories, which these identify with the Moa-hunters. By the year 1820, the original 800 Maori immigrants had increased to 100,000, and had spread over all the North Island and much of the South one. They have considerable mental capacity; tall, robust, and athletic frames; an olive-brown colour; long, rough, black hair; and limbs short in proportion to the body. Their language is a dialect of the Polynesian tongue, of Malay origin, and is more or less understood by all the brown races of the Pacific. When first discovered by Europeans, they were in a half-barbarous condition, and had become split up into many independent and often hostile nations. Like most barbarous tribes, they were fond of ornaments, and had their faces and portions of the body elaborately tattooed with a pigment of charcoal. Their character was marked by considerable bravery, great hospitality to strangers, a spirit of undying revenge for injuries and insults, a delight in oratory, and a superstitious dread of sacred persons and objects. The hereditary chiefs, who were often also priests, wielded extensive powers, but were not despotic, their jurisdiction being checked by public opinion expressed at independent popular assemblies, and by the laws of "Tapu." Tapu (whence our word "taboo") is common to the whole Polynesian family. It consisted in a temporary or permanent state of interdiction, whereby a person or object became sacred, unfit to be touched or used, and under the immediate control of the divinity. The persons of chiefs and priests, human flesh, dead bodies, &c., were always "tapu," or sacred; while any person or thing, such as trees fit for making canoes, roads, rivers, fishing-grounds, birds' breeding-places, &c., could be temporarily "tapued" for particular purposes. Chiefs and priests imposed and removed "tapu," and violations of it were punished by sickness and death sent by the gods, and by death, loss of property, and exclusion from society, at the hands of men. Its

imposition involved serious restrictions of liberty, and with the poorer classes it amounted to a severe punishment; for whatever a tapued object touched was unfit for use, and persons under its ban were not permitted even to feed themselves. The lives of many strangers, including Captains Cook and Marion de Fresne, have been sacrificed in various parts of Polynesia through unwitting violations of the rules of tapu. Numerous gods were worshipped, as well as great chiefs deified after death. To the gods they prayed for food, and to their deified ancestors for the removal and prevention of evil. They believed in the immortality of the soul, and in a future state of existence during which spirits were occupied as on earth, and slaves were killed on the death of a chief to attend him in the shadowy land. The priests were considered sacred, and their chief duties were to see the rules of tapu carried out, to attend to infants, the sick, and the dead, to act as advisers, and to interpret in various ways the wishes of the gods. They were an intelligent but cunning class of men, and, despite the want of temples and festivals, contrived to maintain a powerful influence. Sorcerers and professors of witchcraft were held in great dread.

The land belonged to the whole people, though the chief and his relatives had a claim to the use of a larger share than the other members of the tribe. They clung to their land with great tenacity, and never alienated it, though it was sometimes lost by the fortune of war. As there was complete community of movable property, none were very rich or very poor. Wars were incessant, and arose from violation of rights of property, hereditary feuds, injuries or insults that could not be settled by compensation, and other causes. Their courage was of the Dutch kind; and, before joining battle, they worked themselves into a frenzy of passion by stirring oratorical appeals and the maddening war-dance. A fight was but a series of personal combats, and was decided in a very short time. The dead and the wounded of the defeated party were cooked and eaten, the latter after having been insulted and slain; but the prisoners were generally spared and made slaves. Much of their warfare

consisted in attacking *pas* (rough stockades), which were seldom taken save by stratagem. By the aid of these strongholds, intertribal wars were often prolonged for years. When Captain Cook first visited the islands, he found many of the tribes living permanently in large fortified *pas*. The chief warlike weapons were the *meri*, a stone tomahawk shaped like a soda-water bottle flattened; the *toki* or adze, with a carefully-worked handle two feet long; spears four to fourteen feet long, thrown from a distance, and sharp at both ends; and clubs of iron-wood. The practice of *cannibalism*, or eating human flesh, was connected with war, and apparently prompted by revenge. The persons eaten were slain and wounded enemies, and sometimes men—but rarely women and children—taken prisoners. Women never ate human flesh, and there is little reason to think that it was eaten by men merely for food. To be eaten was the greatest disgrace that could befall a New Zealander, and the imputation that an ancestor or a relative had so fared was a deadly insult. More than a tenth of the population were *slaves*, who were kindly treated, though they could never rise from their abject condition. The chief *articles of food* were fern-root, fish, shell-fish, the small finger-shaped sweet potato (*kumera*), birds, dogs, rats, the taro or yam (a bulbous root), and karaka and Hinau berries. Many think that the dog, the rat, the kumera, the taro, and the karaka were brought from Hawaiiiki. Fish was preserved in large quantities, eels being most highly esteemed. Fern-root (*Pteris aquilina* var. *esculenta*) was dug in November, and dried for some months previous to being roasted for use. The sweet potato is twice, and fern-root thrice as nourishing as the common potato. Pigs, goats, fowls, potatoes, and other vegetables, introduced by Captain Cook, soon became staple articles of diet. Maize, sheep, wheat, and fruit were introduced subsequently. Steaming was the chief method of *cooking*, but roasting was sometimes adopted. Their ovens were holes dug in the ground, into which burning firewood and orange-sized stones were put, and then lightly covered over. When red hot, half the stones were taken out, food put in, and water sprinkled over the stones to generate steam, and then the

whole was covered with fresh leaves, hot stones, and earth. Besides steamed food, they ate maize and potatoes which had become disgustingly putrid from long exposure in water. The men did all the really heavy work. Women were well treated, and they attended to household duties, and made flax mats and cloth for the kilts or petticoats which were the chief articles of clothing with both sexes. Polygamy was frequently practised by chiefs and freemen.

In saluting one another they rubbed noses together for a longer or shorter time, this process being often accompanied by whining talk. Their "tangis" or lamentations, "hakaris" or public banquets, and other interesting but peculiar ceremonies, customs, and amusements, cannot be described in this brief notice. For security and social intercourse they lived in villages, at Cook's visit, generally fortified. These contained a number of separate, roughly-fenced "*whares*" or huts, made of grass and rushes, supported on wooden frames. The huts were small and low, with a fire-place in the centre, small door and window openings, and no chimney. In these cabins the inmates used to sleep in an atmosphere polluted with effluvia and thick with smoke. The foregoing account describes the Maories in their primitive condition, and not as they now live; for contact with civilized men and conversion to the Christian religion have brought about marvellous changes. Their houses and clothing are immensely improved; their rude implements, arms, and utensils have been replaced by those of Europeans. Cannibalism, slavery, warfare, and the superstitious belief in "Tapu," are extinct; while their whole mode of life is slowly becoming assimilated to that of the colonists. Even in districts remote from settlement the natives are in a transition state, and only in a few remote and isolated quarters is the primitive mode of life retained in anything like integrity. In one locality, between the English settlement on the Waikato and Lake Taupo, there still exists a decreasing remnant of a *National Party*, who decry Pakeha customs, and have forsaken the Christian religion for Hau-Hauism, a creed formed by a grotesque combination of Old Testament religious ideas with native superstitions.

Self-interest, which has proved so powerful a stimulus to improvement and progress with the other tribes, will, no doubt, succeed in improving these. The present native population numbers nearly 40,000 souls, of whom 3,000 live in the South Island. Since Cook's visits their numbers have been greatly reduced by epidemic diseases, the effects of a sudden change in their mode of life, and the sanguinary wars that followed the introduction of fire-arms. They still own vast territories in the North Island, which are slowly getting sold or leased to colonists. Wherever native lands are sold, enough is always reserved to support the original owners. Now that the pursuits of war have been abandoned, the natives have turned their energies partly to trade and commerce, but chiefly to agriculture and grazing; and large quantities of maize, wheat, potatoes, stock, and wool are annually sold to the colonists. They also cultivate most European fruits and vegetables, as well as tobacco, which is smoked by men and women alike. The construction of roads and the procuring of improved implements receive greater attention year by year. Anxiety to have their children educated goes hand in hand with their increased industrial activity, and schools, and other means of diffusing instruction and a knowledge of the English tongue, are generally supported. This has been greatly stimulated by the admission of native members into the House of Representatives, and even into the ranks of the Government. On the whole, the Maories have shown a degree of adaptability to changed circumstances rare among uncivilized races. Now that the conflicts inseparable from the first contact with civilized communities have subsided and given way to permanent friendly relations, the Maori race may complete the difficult transition from semi-barbarism to civilization, and transmit posterity to distant ages, notwithstanding the ominous decrease their numbers have undergone during the last half century.*

* The author is largely indebted to Thomson's "Story of New Zealand" for materials for this account of the native race.

CLIMATE OF NEW ZEALAND.

New Zealand, extending over thirteen degrees of latitude, naturally presents considerable diversity of climate; but its character is everywhere insular, mild, and healthy. Though changes of weather are very frequent, and often sudden, there is **great equability**, the average daily range of temperature not exceeding 20 degrees; whereas places in corresponding European latitudes show an average daily range of 30 degrees. The difference between the mean summer and winter temperatures is only 14·8 degrees, as compared with 22 degrees at London, 26 degrees at Paris, 27 degrees at Rome, and 41 degrees in the continental climate of New York. The Auckland summer may be compared to that of Paris, and its winter to that of Malta; while the South Island summer corresponds to that of the south of England, and its winter to that of the south of France.

The **mean temperature** of the South Island is 53·6 degrees, being four degrees lower than that of the North one. The average annual temperature on the West and East Coasts is the same, but on the West the summer is less hot and the winter less cold than on the East. The **rainfall** is high, and about equal for both islands, while in both it is much greater on the West Coast than on the East. The yearly rainfall at Hokitika is thrice that at Dunedin or Christchurch. To this is owing the greater verdure and luxuriance of vegetation on the West slope. As regards the **distribution of rain** over the seasons, New Zealand is divided into two zones—a northern subtropical zone, with winter rain and a comparatively dry summer; and a southern zone, with rain at all times, but with prevailing summer rain. The 40th degree of latitude is, perhaps, the boundary of these zones. In Auckland, which lies wholly within the subtropical zone, the probability of rain in winter is twice what it is in summer. In the South Island rain is pretty equally distributed over the whole year. On the West and South Coasts spring rains prevail; on the East, summer rains. The climate of the Western slope is unusually favourable to

glaciers, and accordingly they there descend to much lower levels than on the Eastern. The Franz Joseph Glacier reaches a district having the mean annual temperature of Vienna, and all the glaciers on the Southern Alps descend to lower levels than those of the European Alps.

Parts on the East Coast occasionally suffer from droughts, particularly Hawke's Bay, Canterbury, and the north and interior of Otago; but the colony as a whole is remarkably well watered. In Auckland the heat of summer generally withers the grass, while in Otago the winter is severe enough to arrest growth and leave fields of grass bare for two or three months. Snow seldom falls in the North Island, and lies only on the high uplands. In the South Island the high inland plains and the mountains have heavy snowfalls in winter, but snow never lies for any time near sea-level, even in Southland and Otago. Frosts are seldom severe in Otago at sea-level, but in the high interior they bind the earth for two months. They gradually diminish in frequency and intensity as you proceed northwards, and are almost unknown in the north end of the North Island.

In the Southern Hemisphere the pressure of the air decreases very rapidly towards the Pole. In New Zealand it is considerably less than in corresponding northern latitudes. The maximum pressure is in April, and the minimum in November. The prevalent winds are the south-west, west, and north-west. In summer, north and north-east winds are most frequent in the North Island, and north-east and south-east in the South Island. On the west coast of the South Island, north-east winds prevail in summer, and south-west in winter. There are few calm days, especially near the coast; the nights are generally calmer than the days. The winds blow with great force throughout the colony, especially around Cook Strait, and they increase in strength from the south northwards. In the North Island the average velocity is ten miles per hour, as against seven in the South. North-west hot winds blow occasionally in summer in Canterbury, Hawke's Bay, and elsewhere. Land and sea breezes are best developed at Hawke's Bay.

Thunderstorms are uncommon, particularly near the coast,

and are seldom violent. In the North Island, and on the west of the South Island, they are most frequent in spring. Elsewhere summer thunderstorms prevail.

Slight shocks of earthquake are not rare on the east of the South Island, and almost frequent about Cook Strait and the south and east parts of the North Island. The *Aurora Australis* is occasionally visible, but very seldom brilliant.

FAUNA AND FLORA.

The **Fauna** and **Flora**, or the native animals and plants of New Zealand, differ widely from those found in any other region of the earth. In connection with the Fauna the most noteworthy peculiarity is the *entire absence of recent and fossil land mammals*, with the exception of two species of bats. As both the animals and plants of the islands are more or less closely connected with those of Australia and South America, we seem bound to assume that the continent of which New Zealand is the remnant was cut off from these two continents before land mammals had been developed on them. Sea mammals, such as whales, dolphins, and seals, are plentiful, and formerly attracted many whaling vessels to these waters. Dogs and rats were introduced by the natives. In the absence of land mammals, the birds occupy the most prominent position in the animal series. At a recent period remarkable wingless birds called **moas** roamed the islands. They are now extinct, but many complete and well-preserved skeletons have been found buried in the soil. The *moa* belongs to the *Struthious* family of birds, which includes the African ostrich, the Australian emu, and the South American rhea. More than twelve species have been discovered, the largest of which reached the enormous height of twelve feet. The extinction of the moa, though recent, took place before the discovery of New Zealand by Europeans. The causes of their extermination are not well understood, but we know that the indigenous inhabitants hunted them eagerly for food. They are now distantly represented by the *Kiwi*, a pigmy moa of the size of a domestic fowl. Over 150 species of *birds* occur, among

which the honey-eaters and parrots are prominent. There are no snakes or noxious reptiles. Lizards are common, and frogs have been found in a few localities. With the exception of eels and lampreys, river fish are scarce and small. *Fish* abound on the coasts, and the oysters of Stewart Island are highly prized. The *insects* appear to be peculiar, and poor in species and generally in numbers.

The Flora of New Zealand is marked by a high proportion of trees and shrubs, nearly all evergreen, a small number of herbaceous plants, and a wealth of ferns (including many tree-ferns) and other cryptogamic plants. A single palm-tree grows throughout the North Island. The *Kauri Pine* and the *Flax plants* (*phormium tenax*, natural order *Liliaceæ*) are the most important vegetable productions from an economic point of view. There are also several other excellent timber-yielding trees, chiefly pines, such as the "totara," "rimu," "puriri," &c. There are no indigenous fruit or grain-yielding plants. It has been said that the flora, though of a unique and very distinct character, is closely related to that of Australia and of South America. From this we must infer that a great South Pacific Continent at one time connected these now widely-severed areas; of this New Zealand formed the highest part, and was left above water when the rest was submerged. There is good reason for believing that it has been isolated from all adjacent continental areas for several millions of years.

Many animals and plants from Europe and America have been introduced and become acclimatized. Cattle, sheep, horses, dogs, cats, goats, fowls, and bees are plentiful, and thrive admirably. Among birds, pheasants, starlings, sparrows, larks, and partridges have gained a secure footing. Rats and mice have followed settlement in all directions, and have exterminated the native rat, just as the introduced dog has killed out his native congener. Rabbits have multiplied so prodigiously as to be a pest, and even seriously restrict the sheep-carrying capacity of runs, as in Southland, and parts of the interior of Otago. Many of our rivers have been stocked with trout and perch, and the efforts to introduce salmon

appear to have been at last crowned with success. European fruit and ornamental trees, shrubs, and plants, and the usual cereals, root crops, and vegetables, thrive perfectly in the suitable climatic zones of the islands. Imported grasses and clovers are fast supplanting the native herbaceous plants in good soil ; while thistles, sorrel, cats-ear, knot-grass, and other weeds of cultivation, are spreading with alarming rapidity, and threaten to change seriously the aspect of the flora. The superiority of introduced over native plants, in the struggle for existence, illustrates in a striking way the increased constitutional vigour which close competition in thickly populated continental areas can bestow. The native forests are, in many parts, being rapidly cut down ; and as they seldom grow up again, we may expect to find the native timber trees gradually giving place to Australian gums and European and American pines. By this means the facies of the flora of the future will be still further changed.

SKETCH OF DISCOVERY AND HISTORY.

New Zealand was discovered by **Abel Tasman**, a Dutch navigator, in 1642, who named it after "**Zealand**," a province in Holland. Captain Cook re-discovered it in 1769, and visited it several times, making an accurate survey of its coast in 1770. Many of the names of prominent coast features were given by him, and they sometimes refer to incidents on the voyage. Soon after Cook's visits, whalers from England and America frequenting the southern seas began to have recourse to New Zealand for water and shelter. Subsequently, many fishery stations were established at various points on the south and east coasts, and around Cook Strait. Trade began also to spring up between the islands and the New South Wales settlement, the natives exchanging flax, spars, &c., for hatchets, iron vessels, and fire-arms. A few Englishmen now began to settle on the North Island, and to acquire land in right of their native wives, or by purchase. Missionary enterprise was begun by the Rev. Samuel Marsden, a Church of England

clergyman from New South Wales, and the movement was favoured by various chiefs, who made grants of land to the missions. Wesleyan and Catholic missions soon followed in the field. The missionaries were very successful in converting the natives, and introduced great improvements in agriculture, and many valuable plants and fruits. They everywhere laboured to protect the natives from the injustice, spoliation, and oppression of the Europeans, who now began to settle in considerable numbers, especially in Auckland Peninsula. To secure this worthy object more thoroughly, a British resident or consul was appointed in 1833; but his powers were inadequate to stem the prevailing anarchy. To regulate the desultory colonization, and check the irregular and fraudulent acquisition of land from the natives, Captain Hobson was in 1840 appointed "Consul to, and eventual Lieutenant-Governor of, the colony of New Zealand." He concluded in that year the "Treaty of Waitangi," already referred to, whereby the chiefs and tribes of New Zealand accepted the supremacy of Great Britain, and their islands became a British colony. For about a year the new colony remained a dependency of New South Wales. The first settlement of any consequence was at Kororareka (Russell), in the Bay of Islands, and here was the original location of the British consul; but Captain Hobson lost no time in transferring the seat of government to Auckland. The systematic colonization of New Zealand was promoted by several home associations, the earliest and chief of which was "The New Zealand Company" of London, incorporated by Royal Charter. In 1840 and 1841 this company established settlements at Wellington, Nelson, and Taranaki. In 1842 New Zealand was created an independent colony, with Captain Hobson as Governor. In the same year Captain Fitzroy succeeded him; and Captain Grey (now Sir George) became Governor in 1845. In 1847 an association of the Scotch Free Church, in connection with the New Zealand Company, took up the settlement of Otago; while the following year saw the Canterbury district settled by the Canterbury Church of England Association. The New Zealand Company,

whose arrangements and management were prejudicial to the progress and prosperity of the country, surrendered all their claims to the Crown in 1852, receiving a compensation of £268,000. Between the years 1843 and 1847 the unscrupulous occupation of native lands, to which the Company had a very doubtful right, brought on a series of fierce and bloody conflicts with the original inhabitants. It was in 1852 that the New Zealand Constitution Act, largely moulded by Governor Grey, was passed by the Imperial Parliament. It granted the colony representative government, under a Governor and a General Assembly. The latter comprised two Houses of Parliament,—an Upper House, styled the Legislative Council, consisting of members appointed for life by the Governor; and a Lower House, styled the House of Representatives, consisting of representatives elected by the people for a term of five years. It also provided for the establishment of Provincial Governments, composed of a Superintendent and a Provincial Council, both elected by the people for a term of four years. The original Provinces were—Auckland, New Plymouth (now Taranaki), Wellington, Nelson, Canterbury, and Otago. In 1861 a series of interrupted native outbreaks commenced in the North Island. These continued for several years, and were finally quelled by the unaided colonists in 1869, the Imperial troops having been withdrawn before the close of the war. After the native disturbances had subsided, the colony made rapid progress. The adoption of the bold Immigration and Public Works Policy by the Fox-Vogel Government, in 1870, gave the prosperity of the country a powerful stimulus. In 1875 the General Assembly passed an Act abolishing the Provincial Governments; and in 1876 followed up this measure by the creation of a large number of counties, governed by County Councils, vested with extensive powers of local government. An Education Act, making education free, and compulsory at the option of school committees, is the latest piece of legislation of national consequence (1877).

STATISTICAL APPENDIX.

European population of New Zealand, March 1878.....	414,412
Population of Marlborough, do.....	7,557
" " Nelson, do.....	25,128
" " Canterbury, do.....	91,922
" " Otago, do.....	114,469
" " Westland, do.....	16,932
" " Auckland, do.....	82,661
" " Hawke's Bay, do.....	15,015
" " Wellington, do.....	51,069
" " Taranaki, do.....	9,463
" " Chatham Islands, do.....	196
Maori population of New Zealand, probably about.....	40,000
Chinese population of New Zealand (1878).....	4,424

European population of North Island.....	158,208
" " South Island.....	256,008

POPULATION OF PRINCIPAL TOWNS.

Akaroa.....	642	Halcombe.....	532
Ashburton.....	1,077	Hamilton.....	1,243
Auckland, with suburbs,		Hokitika.....	3,202
about.....	30,000	Invercargill, with suburbs,	
Balclutha.....	819	about.....	5,847
Blenheim.....	1,701	Kaipoi.....	1,083
Christchurch, with suburbs,		Kumara.....	1,275
about.....	25,000	Lawrence.....	855
Coromandel.....	793	Lyttelton.....	3,476
Dunedin, with suburbs,		Masterton.....	1,673
about.....	35,000	Milton.....	1,161
Feilding.....	759	Napier.....	5,415
Gisborne.....	1,204	Naseby.....	546
Grahamstown.....	5,424	Nelson.....	6,604
Greymouth.....	2,921	New Plymouth.....	2,680
Greytown.....	727	Oamaru.....	3,389

POPULATION OF PRINCIPAL TOWNS—Continued.

Onehunga	2,043	Ross	568
Palmerston North	880	Tauranga	793
Palmerston South	814	Timaru	3,389
Picton	703	Whanganui	3,661
Port Chalmers	1,827	Wellington, with suburbs, about	28,000
Queenstown	574	Westport	1,166
Reefton	1,031		
Riverton	867		

VALUE OF CHIEF ARTICLES EXPORTED IN 1876.

Wool	£3,395,816	Leather	£16,507
Gold	1,268,599	Minerals	14,824
Grain (wheat, barley, oats)	337,878	Fishery Products	11,341
Kauri Gum	109,234	Bran and Sharps	9,267
Tallow	109,896	Butter and Cheese	7,398
Timber	49,552	Flour	7,049
Meats (potted)	21,933	Oatmeal	6,865
Sheepskins, &c.	19,735	Fungus	6,227
Hides	19,408	Potatoes	5,367
Flax	18,285	Biscuits	5,255
		Seeds (grass, &c.)	5,239

TABLE OF IMPORTS FROM, AND EXPORTS TO,
DIFFERENT COUNTRIES (1876).

COUNTRY.	IMPORTS.	EXPORTS.
United Kingdom	£4,451,269	£4,533,389
Australian Colonies (except Victoria)	772,856	297,584
Victoria	1,169,739	651,381*
Pacific Isles	45,314	88,293
United States	192,287	68,831
European Countries	15,679	—
China	66,709	28,623
India	25,794	175
Mauritius	10,765	—

* This includes gold of the value of £470,262.



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